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Note generali	Includes index.
Nota di contenuto	Introduction -- Thirty years of contrast enhanced breast MRI -- The mantra about low specificity breast MRI -- BRCA and other genes conferring hereditary breast cancer predisposition -- Screening mammography: One size fits all? -- MRI protocols for breast cancer screening -- Contrast materials for screening MRI and concerns about tissue deposition -- Applying MRI BI-RADS in a high-risk population -- CAD systems for breast MRI screening -- Phenotype presentation and radiogenomics of breast cancer with special focus on high-risk women -- The body of primary evidence about MRI for high risk screening: retrospective and prospective studies -- High-risk screening: MRI alone? -- Secondary evidence from systematic reviews and meta-analyses -- Radioprotection issues for women with hereditary predisposition for breast cancer -- Impact of MRI screening on high-risk patient outcome -- The special case of previous chest radiation therapy -- IT infrastructure for data managing in multicenter high-risk screening -- Guidelines and recommendations all over the world:

agreements and differences -- Medical options: Pharmacopreventio- Surgical options: Prophylactic mastectomy and oophorectomy -- Psychosocial aspects of high-risk of breast cancer -- Calculating, using and improving individual breast cancer risk estimates -- MRI for screening women with a personal history of breast cancer -- Screening MRI for the intermediate risk: an open issue -- Looking at the future: Personalized breast cancer screening -- Acknowledgments. .

Sommario/riassunto

This book offers a comprehensive overview of the use of breast MRI for screening high-risk women, including those with familial-genetic hereditary predisposition and previous chest radiation therapy, typically lymphoma survivors. It discusses the historical background of studies and research that provided the body of evidence in favor of MRI screening of these women. Technical and clinical topics are treated in dedicated chapters, including models for individualized risk estimation, radiogenomics of breast cancer in high-risk women, computer-aided detection/diagnosis and machine learning systems applied to breast MRI, and psycho-oncology issues. Alternatives to breast MRI screening such as pharmaco-prevention and prophylactic mastectomy are also discussed, taking into account the public debate on the “Angelina Jolie” effect. The high breast cancer risk model is proposed as a paradigm for personalized medicine. This book will be of interest to radiologists, surgeons, oncologists and to all professionals devoted to female healthcare.